

# DESIGNING USER INTERFACE E-MENU BASED ON ANDROID PLATFORM

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**Abstract** - Restaurants have become a part of life in our society. Along with the development of the restaurant, the development of a menu that is one of the spearhead of the restaurant was also developed. Menu is no longer in paper form but also thrive in a digital form. These menus have limitations such as lack of interaction between users and inflexibility updating the data. Therefore in this paper, we discuss about our project is the creation of e-menu. E-menu that is one of the digital form, not only used to display the menu but also to process the order process, from customer order to customer payment. We believe the future development of e-menu will be rapid. Along with excellence in flexibility of data updates and feature-feature that can be inserted POS in it.

**Key Words:** Restaurant, menu, E-menu.

## I. INTRODUCTION

Nowadays the food business has been very widespread. Food business is extremely diverse, ranging from street vendors to manufacture. One form of food business that is already very widespread is the restaurant business. Restaurant is a place or building that organized commercial, which held a good service to all customers by way of food and beverages. The goal of restaurant is to find operating profit and to make customer happy.

One of the spearheads in the restaurant business in addition to a dish that tastes delicious menu is served to consumers. Menu is one form of representation of food and beverages will be served. According to Uripri, the menu is the arrangement of dishes, which consist of one or several kinds of dishes are

served to a person or seekelompok people at breakfast, lunch, dinner or snack<sup>[1]</sup>.

Currently the menu has been developed rapidly. The types of menus that we usually encounter today in the form of paper, books, boards, flyers, digital (LCD), and a menu that we can meet when opening the website (online). Weakness menu we've describe above, is the lack of interaction between consumers with a menu, for the manager, the menu is less flexible, because if the change occurs, conventional menu can not be changed quickly. So sometimes, in cases where customers ordered the food that is not sold or the stock runs out in a restaurant, because of delays in updating data on the menu.

## II. PROCEDURE FOR PAPER SUBMISSION

In this research we refer to the theory of Pressman, the waterfall model theory.

- At the early stage we analyze the needs of what is our system need.
- We then create a storyboard to design so the system will not come out of the plan.
- For the next stage, we create a diagram that is used to describe the system as a whole.
- Then we start designing the user interface and features that exist in the program. (Designing the user interface can be done by first making it in Photoshop, and then implemented in the program; in this case, we use the base XML)
- In the final stage, we started a program in accordance with the above two stages.

Programs that we made based android.

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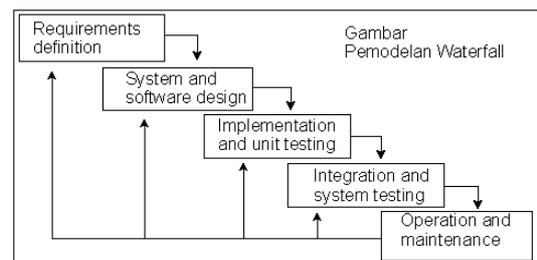


Figure 1. Waterfall model<sup>[2]</sup>

Here's the translation of the whole system which we describe in the use case diagram:

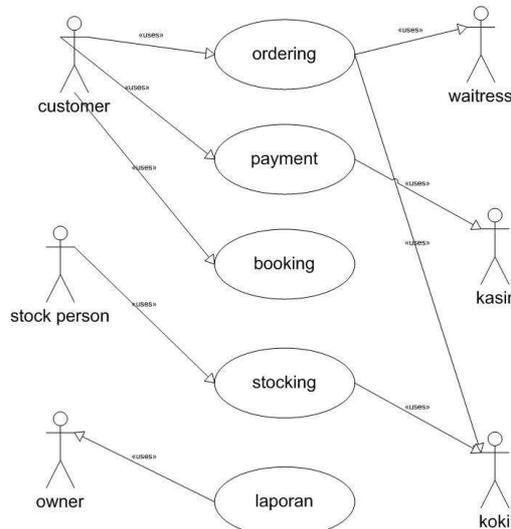


Figure 2 Use Case

#### Use Case Explanation:

Customer has 3 action:

1. Order the customer to choose the menu and forwarded to the system
2. Pay the customer making a payment
3. Book the customer to choose the table number

Stock Person has the action:

1. Stocking the stock person doing the input stock and disable menu

Owner has the action:

1. Report the owner receives sales reports from the system

Waitress has the action:

1. GetOrderCustomer the waitress received an order from customer
2. GetOrderCook the waitress received an order from the chef to deliver food to the customer
3. SendBill the waitress received a bill from customer requests and deliver the bill to the customer table

The cashier has the action:

1. Billing the cashier got a total order of the customer and then calculate the total price of the order

Chef has the action:

1. Cook is a chef to receive customer lists from the menu which will then be cooked
2. Notify the chef to receive stock updates from the system

### III. CONCLUSION

Making E-Menu application is intended to address the problems that exist in a variety of restaurants and cafes, as efficiency is needed at every restaurant on the process of ordering food, recording orders, payments process and others. E-Menu is made based on Android should be effective and efficient at the existing restaurant system, such as decreasing levels of human error which may occur during food recording can be minimized with the use of our E-Menu, the level of service will increase the speed and can make the customer satisfied in the event of service restaurants. Given the technological developments that have been growing rapidly, many restaurants that use smart devices as part of their restaurant. But from our survey results directly to the restaurant, smart devices are used only limited to the ordering process and the recording of the order menu. And with the use of existing systems, there are still inefficient process on the restaurant's system, such as queues inputting orders on PoS terminals, the level of services remains low speed and error rates are still high.

### REFERENCES

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